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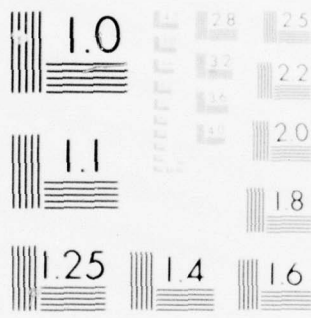
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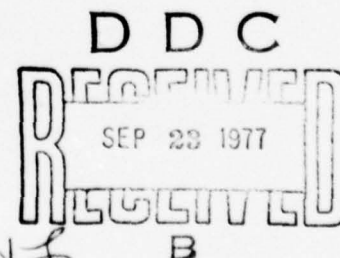
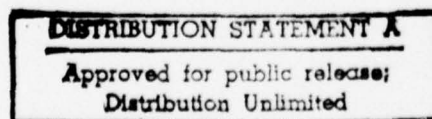
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I. INTRODUCTION

The House Committee on Armed Services has stated that "One of the most important contributing factors [in moving toward a higher priced defense structure] has been the marked increase in the cost of defense manpower."* The Committee specified particular areas related to manpower efficiency in which the Department of Defense (DoD) should initiate studies if they are not presently under intensive review. One of the areas specified for study is the mix of the Defense labor force among active military, reserve military, in-house civilians and contract personnel.

In its report, the House Committee asked the following three questions regarding the mix of the defense labor force:

1. What criteria determine the mix of the defense labor force?
2. What methods exist or are being developed for determining the full cost of each?
3. What will be the mix in 1985?

The purpose of this report is to present the findings to date on the first two questions. The third question was answered in DoD's 22 September 1975 response to the Chairman of the House Committee: "We do not foresee that the manpower mix in 1985 will be substantially different from what it is now".**

This report addresses the policies governing the mix of the defense labor force given that requirements exist for a relatively stable number of people. It does not address the process for determining manpower requirements. Manpower requirements are addressed annually in the Annual Report of the Secretary of Defense and the DoD Manpower Requirements Report.

*House, Committee on Armed Services, Authorizing Appropriations, Fiscal Year 1976, H. Rept. 94-199, 94th Cong., 1st sess., 1975, p. 76. (See Appendix A)

**Letter from William K. Brehm, Assistant Secretary of Defense (Manpower and Reserve Affairs), to the Honorable Melvin Price, Chairman, House Committee on Armed Services, September 22, 1975. (See Appendix B)

II. SUMMARY

CURRENT POLICY

Current DoD policy calls for an integrated approach to manpower planning, programming, and utilization, in which all forms of manpower are considered in establishing the mix of the defense labor force among active military, reserve military, in-house civilians, and contract services manpower. In addition, DoD seeks to achieve the least costly mix of manpower consistent with military requirements and other needs of DoD. This general policy is in agreement with the intent of Congress concerning the defense manpower mix as expressed in P.L. 93-365.

Active forces are assigned that portion of the DoD mission requirement needed for deterrence, peacetime presence, and immediate response. Reserves provide forces needed to augment the active forces in a major war involving mobilization. It is the policy of DoD that all spaces be filled by civilians unless there are compelling reasons otherwise. Generally, military incumbency is justified when there is a need in law for a military person, when the type of work to be performed involves combat or direct combat support, when the position requires military experience, when a military billet in the United States is needed to provide for breaks between overseas assignments, or when the position is used to provide training and experience to military personnel.

With regard to in-house versus contract-out determinations, the National policy is to rely upon private enterprise for goods and services except in those instances where it is not in the national interest to do so. OMB Circular No. A-76, which states the Government policy regarding competition between the Government and private enterprise, lists circumstances under which the Government may provide commercial or industrial-type products or services for its own use.* These include: when procurement from a commercial source would disrupt or materially delay an agency's program, when it is necessary for the Government to conduct a commercial or industrial-type activity for purposes of combat support or individual and unit retraining of personnel or to maintain or strengthen mobilization readiness, whenever the product or service is unavailable from an alternative source when needed, and finally, if procurement from the private sector would result in higher cost to the Government. Efforts are being made to strengthen DoD's implementation of A-76.

COST ESTIMATION METHODS

Appropriate methods of costing are in use. The cost of a military or in-house civilian position in a particular grade is estimated based

*Office of Management and Budget, Policies for acquiring commercial or industrial products and services for Government use, OMB Circular No. A-76, August 30, 1967.

on the cost schedules and calculations contained in the OASD(Comptroller) report on the relative dollar cost of military and in-house civilian manpower.* An updated version of this report, reflecting current costs, is being prepared. The cost estimation method prescribed by OMB Circular A-76 applies to the procurement of goods or services from in-house DoD commercial and industrial activities (C/I), other Government sources, or private commercial sources. The A-76 costing procedure uses the information contained in the Comptroller's Report and addresses the cost of providing a particular service with each of the different forms of manpower, rather than just the cost of the manpower. Although these costing methods are conceptually satisfactory, they may be inadequate in specific cases because of practical problems in application.

RECENT CHANGES IN THE MIX

The FY1964-1976 period was turbulent with respect to the defense manpower mix because of the Vietnam conflict, force structure changes, reductions in support activities, the shift to the All Volunteer Force and civilianization. During this period the civilian portion of the active labor force rose from 30 to 33 percent, as military strength fell by 604,000 while civilian employment declined by 130,000. In recent years, DoD's reliance upon the U.S. private sector for goods and services covered by the A-76 program has remained fairly stable, averaging about 130,000 manyears annually.

*Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), Economic Cost of Military and Civilian Personnel in the Department of Defense, March, 1974.

III. CRITERIA USED TO DETERMINE THE MIX OF THE DEFENSE LABOR FORCE

BACKGROUND

The Department of Defense follows three principles in determining the mix of the defense labor force. First, the active military manpower in peacetime should be at the minimum level necessary to satisfy national security objectives. Second, the private sector should be relied on to provide goods and services to the maximum extent possible. Third, the government should conduct its operation in the most cost effective manner possible. These principles are reflected in the policies which determine the mix of the defense labor force.

THE GENERAL POLICY

The foremost defense manpower objective is to assure that sufficient trained personnel are available upon mobilization to man the defense force and support structure. In planning to satisfy this objective DoD includes active military personnel, reserve paid-drill personnel, unpaid reservists and in-house civilians. In addition, DoD relies upon the private sector to provide some services which could otherwise be provided by DoD employees. DoD policy is to balance its manpower programs among the various components of the defense labor force to achieve the least costly program, consistent with military requirements and other DoD needs.

This policy conforms with the intent of Congress as stated in Public Law 93-365:

It is the sense of Congress that the Department of Defense shall use the least costly form of manpower that is consistent with military requirements and other needs of the Department of Defense. Therefore, in developing the annual manpower authorization requests to Congress and in carrying out manpower policies, the Secretary of Defense shall, in particular, consider the advantages of converting from one form of manpower to another (military, civilian, or private contract) for the performance of a specified job.*

The following describes major types of decisions to show how the general policy is used in making determinations concerning the defense manpower mix.

*Congress, House, Department of Defense Appropriation Authorization Act, 1975, Pub. L. 93-365, 93rd Cong., 2d Sess., 1974, H.R. 14592, sec. 502.

ACTIVE-RESERVE DETERMINATIONS

The basic determination to be made is which portion of the total force is to be in active status in peacetime, and which is to be in reserve status. (All active military personnel and peacetime DoD civilian employees are in an active status.) Active units are assigned only that portion of the mission requirement which is needed for a contingency not involving mobilization; for early deployment in a major war (moving before reserve units can be ready); to cover peacetime force deployments overseas; and to maintain a strong deterrent against major conflict. Reserve Components are structured to meet the additional requirements of a major war involving mobilization. Additionally, the Reserve Components should also be responsive to a possible limited call-up under Presidential authority to involuntarily order to active duty 50,000 Selected Reservists for a limited period without declaration of war or national emergency. Those units which are needed to support the Total Force but which are not needed until after the initial combat phase may be placed in the unmanned component. DoD policy calls for equipment to be procured in advance for the unmanned component units so that they can be activated and manned after mobilization in time to meet their required operational dates.

DoD has been and is continuing to review its mix of active, reserve, and unmanned units and has reported to the Congress on this subject on two previous occasions: The Total Force Study of June 1975 and the Reserve Missions Report of February 1976. As technology, threat, and doctrine change, DoD will continue to revise the mix among active, reserve and unmanned units to achieve the greatest capability within available resources. Economy is naturally an important consideration in making the active-reserve determination since reserve forces are less costly than active forces.

MILITARY-CIVILIAN DETERMINATIONS

Having made the active-reserve determination, the next determination is whether a job is to be performed by a military person or by a civilian. A job to be accomplished is initially described by a set of tasks to be performed. The job is translated to a position or billet, which describes the kind of person (in terms of knowledge, skills, and experience) required to do the work.

It is the policy of the Department of Defense that each position or billet be filled by a civilian unless there is good reason otherwise. That is, the presumption is that a space is to be filled by a civilian, and the burden of proof is on the Service or subordinate manager to prove that a military person is required because of the nature of the job. As stated in DoD Directive 1100.4:

Civilian personnel will be used in positions which do not require military incumbents for reasons of law, training, security, discipline, rotation, or combat

readiness; which do not require a military background for successful performance of the duties involved, and which do not entail unusual hours not normally associated or compatible with civilian employment.*

This 1954 statement of policy was reaffirmed in 1970 by DoD Directive 1400.5, which also states that the:

Use of civilian employees affords abilities not otherwise available, assumes continuity of administration and operation, and provides a nucleus of trained personnel necessary for expansion in any emergency.**

DoD Directive 1100.9*** expands upon these criteria with regard to military-civilian staffing of management positions in support activities. This directive emphasizes the need for having both military and civilian personnel fill these types of positions. It provides that civilian personnel will normally be used when the skills required are usually found in the civilian economy, continuity is essential, and civilian career development is essential.

Military-civilian determinations cannot be based on peacetime requirements alone, but must also take into account mobilization requirements. There are functions which could be performed by civilians in peacetime but not when mobilized. For example, much of the ship maintenance function performed by tenders could be performed by civilians at fixed sites were it not for the fact that this maintenance function must be deployable during mobilization.

Least cost is an implied criterion in the guidance concerning military-civilian determinations because civilians currently are generally less costly than military manpower. This results primarily from the fact that military personnel generate more secondary support requirements than do civilians; e.g. most military individuals are clothed, housed, fed, trained, and provided medical treatment by the DoD while this is generally not the case with civilians. Thus, a military person generates a requirement for some fractional part of another person to maintain base housing, operate hospitals and schools, and perform other necessary personnel support functions. Further, additional backup (or pipeline) positions are included in military strength as trainees, transients, patients, and prisoners.

*Department of Defense, Guidance for Manpower Programs, DoD Directive 1100.4, August 20, 1954, p. 2.

**Department of Defense, Statement of Personnel Policy for Civilian Personnel in the Department of Defense, DoD Directive 1400.5, January 16, 1970, p. 2. (This policy is identical to that of DoD Directive 1100.4 with the exception of the deletion of the unusual hours criterion.)

***Department of Defense, Military-Civilian Staffing of Management Positions in the Support Activities, DoD Directive 1100.9, September 8, 1971.

Civilians have not always been less costly than military, especially during the draft and prior to the 1971 adjustment of military pay to generally competitive levels. Cost probably was not a primary consideration when the military-civilian determination policy was first developed. Today, instances do occur where the nature of the job would necessitate the payment of overtime, holiday pay, night differentials, or some other premium that would make the use of civilians more costly, but these are not the norm. Instances may also occur where an occupation receives high pay in the civilian pay system and comparatively low pay in the military.

CONGRESSIONAL INFLUENCE ON THE MILITARY/IN-HOUSE CIVILIAN MIX

Congress has influenced the in-house defense manpower mix, not only by directing DoD to undertake civilianization programs but also by reducing DoD's civilian manpower requests. In 1972 the Congress expressed its desire that the DoD conduct a thorough analysis of civilian substitution potential and implement civilianization programs for FY1973.* In response to this direction, and based upon the recommendations of the Central All-Volunteer Force Task Force**, the DoD began a civilianization program which resulted in a reduction of 48,000 military positions and an increase of 40,000 civilian positions between FY1973 and FY1975. However, concurrent with this program, Congress enacted legislation (in the annual Department of Defense Appropriation Authorization Acts) that reduced the DoD civilian manpower request by 32,000 in FY1975 and 23,000 in FY1976.

Similarly the Revenue and Expenditure Control Act of 1968***, which placed a limitation on the hiring of executive branch civilians, cut short by about 5,000 positions the DoD civilianization program being undertaken at that time.

There is concern among DoD manpower planners that Congress continues to view the civilian portion of the defense labor force as a lower priority resource, less necessary than the military to the accomplishment of national objectives. The House Committee on Armed Services commented in its FY1976 Report that:

*Congress, Senate, Committee on Armed Services, Authorizing Appropriations For Fiscal Year 1973, S. Rept. 92-962, 92d Cong., 2d sess., 1972; and Congress, House, Committee on Appropriations, Department of Defense Appropriations Bill, 1973, H. Rept. 92-1389, 92d Cong., 2d sess., 1972.

**Department of Defense, Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs), Central All-Volunteer Force Task Force, Civilian Substitution (A Report on Substitution of Civilians for Military Personnel in the Armed Forces), October, 1972.

***Congress, House, Revenue and Expenditure Control Act of 1968, Pub. L. 90-364, 90th Cong., 2d sess., 1968, H.R. 15414, sec. 201.

...civilian manpower, by its very nature, is in a support role and is an element that should receive first consideration when reductions are taken.*

While it is true that DoD civilians are in support functions, it is not true that the functions they perform are lower priority ones. Mission accomplishment depends on support. It would be wrong to conclude that the ratio of military to civilians is a measure of efficiency.

IN-HOUSE - CONTRACT DETERMINATIONS

It is Federal policy** that all Government Departments and Agencies will rely upon the private sector for the provision of required products and services to the maximum extent consistent with effective and efficient accomplishment of their programs. The presumption is that a product or service should be provided by the private sector. In DoD the burden of proof is on the Service or Defense Agency to prove otherwise. As stated in DoD Directive 4100.15,*** DoD activities that produce goods or services similar to those available in the private sector, i.e., DoD commercial or industrial activities, may be continued in operation or initiated as "new starts" only when one or more of the following "compelling" reasons exist:

- a. Procurement of a product or service from a commercial source would disrupt or materially delay an agency's program.
- b. It is necessary to the Government to conduct a commercial or industrial-type activity for purposes of combat support or for individual and unit retraining of military personnel or to maintain or strengthen mobilization readiness.
- c. A satisfactory outside source is not available and cannot be developed in time to provide a product or service when it is needed.
- d. Procurement of the product or service from an outside source will result in higher total cost to the government.

Further:

...DoD Components will be equipped and staffed to carry out effectively and economically those commercial or industrial activities which must be performed internally

*Congress, House, Committee on Armed Services, Authorizing Appropriations, H. Rept. 94-199, 94th Cong., 1st sess., 1975, p. 74.

**Office of Management and Budget, Policies for acquiring commercial or industrial products and services for Government use, OMB Circular No. A-76, August 30, 1967.

***Department of Defense, Commercial or Industrial Activities, DoD Directive 4100.15, July 8, 1971, p. 3.

in order to meet military readiness requirements. All other required products or services will be obtained in the manner least costly to the Government (by contract, by procurement from other Government Agencies, or from DoD commercial or industrial activities).*

This policy of relying upon the private sector for goods and services is to DoD's advantage. The profit motive provides incentive for the contractor to make innovative use of technology and manage efficiently to reduce the cost of his operation, presumably with a savings to the government. The government can also benefit by applying contractor initiated innovations to its own similar operations.

*Ibid., p. 4.

IV. DEFENSE MANPOWER COSTING TECHNIQUES

BACKGROUND

Several methods currently exist for estimating the cost of the different forms of manpower comprising the defense labor force. However, it is important to recognize that estimating manpower cost is but one step in determining the least costly form of manpower for a particular function. Manpower itself is not an output; rather the services provided by manpower are. Thus the appropriate determination in developing the mix of the defense labor force is: "With which form of manpower can a particular job be accomplished at the least cost?" A method also exists for making this determination.

COSTING METHODOLOGY USED TO COMPARE MILITARY AND CIVILIAN MANPOWER

The cost elements used to compare military and in-house civilian personnel at various pay grades are identified in Table 1. Under each of these elements, cost is defined as the identifiable average annual dollar cost attributable to the Federal Government of incumbent military or in-house civilian DoD employees. The costs are computed on an incremental basis and represent only that portion of the total cost that varies proportionally with a change in manpower strength. The cost factors, as well as guidance concerning their use, are contained in a report periodically published by the Office of the Secretary of Defense(Comptroller).*

In this report, dollar cost and each of its elements are displayed according to particular military service and pay grade for military personnel, general schedule civilian personnel, and wage rate civilian personnel. It is planned that the 1976 report will cover these same items, expanding and improving where possible. Civilian training cost will also be included for greater comparability.

COSTING METHODOLOGY USED TO COMPARE IN-HOUSE AND PRIVATE SECTOR OPERATIONS

OMB Circular A-76 and DoD Instruction 4100.33 (which implements A-76) outline the principles and specify the cost elements (see Table 2) used in comparing the cost of procuring products or services from Government or private commercial sources. As is the case with the approach used to develop estimates of military and in-house civilian costs, the Circular A-76 procedure calls for the computation of comparative cost on an incremental basis; i.e. estimation of the amount by which costs would be (or are) changed as a result of engaging in the particular activity. As can

*Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), Economic Cost of Military and Civilian Personnel in the Department of Defense, March, 1974. (To date, there have been three of these reports published; the first being in 1966 and the most current in March 1974. A new version reflecting current costs is in preparation.)

Table 1

COST ELEMENTS USED TO COMPARE MILITARY AND IN-HOUSE CIVILIANS

COST ELEMENT	MILITARY	CIVILIAN
<u>Salary</u>		
Basic Pay	X	X
Quarters	X	
Subsistence	X	
Income Tax Adjustment*	X	
<u>Special & Premium Pays</u>		
Hostile Fire	X	
Hazardous Duty	X	X
Diving	X	X
Certain Places	X	X
Reenlistment Bonus	X	
Proficiency Pay	X	
Special Pay to Medical Personnel	X	X
Separation Pay	X	X
Overtime, Night Differential, and Holiday Pay		X
<u>Supplemental Benefits</u>		
Retirement	X	X
VA cost for Dependency & Indemnity Compensation	X	
Death Gratuity	X	
Social Security	X	
Medical Care	X	
Health Benefit Contribution		X
Worker's Compensation		X
Mortgage Insurance	X	
Terminal Leave	X	
Unemployment Compensation	X	X
VA Educational Benefits	X	
<u>Non-Compensation Personnel Costs</u>		
Clothing Allowance	X	X
Personal Money Allowances	X	
Dislocation Allowances	X	X
Overseas Station Allowances	X	X
Burial Costs	X	
Life Insurance (SGLI)	X	X
Permanent Change of Station Travel	X	X
Training	X	X
Operations and Maintenance Support Costs	X	X

*Estimated average income tax that would be paid if the allowance for quarters and subsistence were taxed.

be seen from Table 2, use of the A-76 procedure to estimate the cost of providing a service either in-house or through contract involves estimating many costs other than those for labor. These other costs may vary significantly between performance of a function in-house or with a contract for services. Additionally, the cost of contract manpower as well as the cost of contracting for a specified service can vary substantially depending upon the contractor's organization, his operating techniques, and the prevailing wages in his locale. This is true even though the standards of performance expected in contractor-operated functions are written into the contract specifications. In-house variability is considerably less because of standard wage rates, regulations and operating procedures.

PROBLEMS IN DETERMINING LEAST COSTLY FORM OF DEFENSE MANPOWER

It is not always necessary to conduct a cost analysis as part of the mix determination process. As stated earlier in this report, DoD policy calls for all spaces to be filled by civilians unless there are compelling reasons for use of military. Further, it was indicated that civilians are generally less costly than military. Thus, the DoD policy preferring the use of civilians is consistent with a policy that calls for use of the less costly form of manpower.

The cost criterion cannot be applied in all cases on a job-by-job basis. There are cases where a job is filled by a military incumbent even though a civilian could do that job at less cost. This is necessary to meet the military mission of the DoD. For example, as mentioned previously, some maintenance jobs in the Navy could be done less expensively in peacetime by civilians. However, there is a wartime requirement to deploy the entire maintenance activity to a combat zone. Thus, the jobs must be filled by military.

Cost is the fourth of four specific criteria (listed on pages 8 and 9) for determining whether a DoD commercial or industrial-type activity may be continued in operation or initiated as a new start. The first three criteria are applied before applying the criterion of cost, since any of the former take precedence. For example, even if a cost analysis favored a commercial source, a function could not be contracted if it "would disrupt or materially delay an agency's program."

Making in-house and contract-out cost comparisons is a complicated business that presents several major challenges. These are discussed in the following paragraphs. Section V discusses some of the steps DoD is taking to meet some of these challenges.

The Cost Differential

The DoD Instruction implementing OMB Circular A-76 states:

Generally, an in-house operation should not be approved unless cost of a Government activity will be at least 10 percent less than costs of obtaining

Table 2
COST ELEMENTS USED TO ESTIMATE
IN-HOUSE AND CONTRACT COSTS*

A. Cost elements involved in the estimation of the cost of procurement from commercial sources are:

- contract cost; i.e., "going contract price" in the local or regional area
- transportation charges
- contract administration and related costs
- material and supplies furnished to the contractor by the Government including any costs for transportation, storage, etc.
- costs associated with contractor use of Government-owned equipment and facilities
- costs to the Government of rehabilitating, modifying or expanding Government-owned equipment or facilities provided the contractor
- incentive or premium costs
- standby maintenance costs
- other costs, e.g. cost for premature personnel retirement; severance pay, home-owner's assistance, and moving/relocation expenses which will be paid solely because a Government in-house activity is discontinued, etc.

B. Cost elements involved in the estimation of in-house costs include:

- military personnel costs (computed using DoD Handbook 7220.9H, Accounting Guidance Handbook)
- in-house civilian personnel costs [including gross annual pay plus the Government's contribution for civilian retirement and disability (@7.14% of gross), health insurance (@1.0% of gross) and life insurance (@0.3% of gross)]
- other personnel costs, e.g. travel, per diem and moving expenses, living and uniform allowances, initial and recurring costs of personnel training, etc.
- materials, supplies, utilities and other services including initial start-up costs for new activities
- maintenance and repair
- overhead costs including finance and accounting, personnel, legal, local procurement, medical, police, fire, management, etc.
- federal taxes
- depreciation
- interest, using as a rate of interest, the current interest for long term Treasury obligations
- insurance
- other indirect costs

*Source: Department of Defense, Commercial or Industrial Activities-Operation of, DoD Instruction 4100.33, July 16, 1971, Encl. 3, Att. 1.

the product or service from commercial sources. The 10 percent differential is not intended to be a fixed figure. The differential may be more or less than 10 percent depending upon the facts of each individual case.*

No cost differential figure is provided to justify the continuation of an existing in-house operation, in contrast to starting a new one.

Further, Circular A-76 states that the disadvantages of starting or continuing a Government activity must be carefully weighed. The disadvantages cited are the removal or withholding of property from the tax rolls, reduction of revenues from income and other taxes, diversion of management attention from the Government's primary program objectives, and potential loss due to such factors as obsolescence of plant and equipment and unanticipated reductions in the Government's requirements for goods and services. The guidance provides that Government commercial or industrial-type activities should not be started unless the savings are sufficient to justify the assumption of these and similar risks and uncertainties.

Objective Cost Estimation

There are significant differences in the approaches used by the Services to estimate and compare the cost of in-house and contract support. In the Army, Navy, and Marine Corps, the cost comparisons are directed by the local commander, and the estimates of contract support costs are made by the Government personnel employed at the installation. The parties involved in the cost analysis may thus have a stake in the outcome. The objectivity of the cost estimate may be biased if the in-house activity whose existence is in jeopardy prepares the cost estimate for both in-house and contractor operation.

In an attempt to overcome this problem, the Air Force develops an estimate of the in-house cost for the particular activity while concurrently soliciting bids from qualified contractors. The work is then awarded to the lowest bidder, either in-house or a contractor. The objectivity of a contractor's bid also can be questioned, since a contractor may submit an unreasonably low bid to "buy in". To overcome this problem the Air Force employs a pre-award survey to ensure that the low bid is realistic.

Accurate Cost Estimation

In addition to the problem of objectivity, there is also a challenge in arriving at an accurate cost estimate. Many of the data required to develop estimates of both contract and in-house costs are not readily

*Department of Defense, Commercial or Industrial Activities-Operation of, DoD Instruction 4100.33, July 16, 1971, Encl. 3, p. 2.

available. Army, Navy and Marine Corps in-house cost analysts are understandably at a disadvantage when preparing estimates of a contract operation. The cost analysts would need to know not only all the potential contractor's costs, but also the methods he would employ to do the job, e.g., capital/labor mix, method of organization, productivity, etc. Additionally there is often uncertainty in estimating the in-house cost of an operation which is under consideration for conversion from contract, particularly if DoD had had no previous applicable experience with performing the function in-house.

Changing the Method of Operation

An equality in the operating method between an in-house and a contract operation is assumed when applying the cost criterion. Focusing on the cost comparison overlooks the alternative of changing the method of operation, for example, by using more equipment and fewer people.

V. RECENT CHANGES IN THE MIX OF THE DEFENSE LABOR FORCE

CHANGES IN THE MILITARY AND CIVILIAN MIX OF THE DEFENSE LABOR FORCE

Table 3 shows the changes in the mix of the military and civilian components of the defense labor force between fiscal years 1964 and 1976.

Table 3

Changes in the Mix of Military and Civilian Defense
Labor Force FY1964 - 1976
(End Strength in Thousands)

Fiscal Year	Total	Active Military	%	Selected Reserve	%	Civilians*	%
1964	4,815	2,685	(56)	954	(20)	1,176	(24)
1968	5,864	3,547	(60)	922	(16)	1,395	(24)
1970	5,316	3,065	(58)	986	(18)	1,265	(24)
1973	4,274	2,252	(53)	921	(22)	1,101	(25)
1976	3,967	2,081	(53)	840	(21)	1,046	(26)

*Includes Direct and Indirect Hire; excludes civil functions and youth programs

At the end of FY1976 this population totaled almost 4.0 million individuals with 53 percent active military, 21 percent Selected Reserve, and 26 percent in-house civilians. As can be seen from the table, there were significant changes in both active military and civilian strength during FY1964-1976. The predominant reasons for DoD manpower changes in this period were the Vietnam conflict with its associated build-up and subsequent phase-down, changes in force structure, reduction in support activities, and numerous base realignments. Changes in the mix were also caused by programs of civilian substitution conducted during the FY1964-1968 and FY1973-1975 periods.

CHANGES IN THE OVERALL ACTIVE MILITARY AND CIVILIAN LABOR FORCE

The proportion of the total defense labor force accounted for by any of its components is not in itself a measure of the goodness of a particular manpower mix. However, it does serve as a useful indicator of overall trends.

Table 4 displays the percent of the active military and civilian labor force accounted for by civilians for selected years during the FY1964-1976 period. The data show that since the Vietnam conflict there has been an increase in the proportion of civilians.

Table 4

Civilian Percentages FY1964 - 1976

Fiscal Year	Civilian Percentage
1964	30
1968	28
1970	29
1973	33
1976	33

CHANGES IN THE ACTIVE MILITARY AND CIVILIAN LABOR FORCE IN TERMS OF DEFENSE PLANNING AND PROGRAMMING CATEGORIES

A convenient way to discuss changes in the defense manpower mix is to use the Defense Planning and Programming Categories (DPPC's). These categories are used throughout the annual Manpower Requirements Report. They aggregate activities performing similar functions. Consequently, the DPPC system is especially well suited for explaining how manpower resources are used.

Table 5 shows changes in the portion of the active military and civilian labor force accounted for by civilians for FY1964 and FY1976, arrayed according to selected DPPC groupings.

Table 5

Changes in Active Military-Civilian Labor Force by DPPC Groupings

DPPC Grouping	Civilian Percentage	
	FY1964	FY1976
Strategic and General Purpose Forces	6	8
Logistics	93	95
Research and Development	64	71
Base Operating Support	46	55
Command	39	46
Medical Support	28	34
Other	17	19
Total DoD Program	30	33

The table shows increased reliance upon civilians in all of the groupings, especially support. This resulted from a concerted effort by DoD to maintain combat forces while reducing military strength in support functions.

CHANGES IN CONTRACT SUPPORT SERVICES

The data base of the OASD(I&L) "Annual Inventory of Commercial and Industrial-Type (C/I) Activities and Contract Support Services" contains data for FY1972-1975 regarding the extent to which the private sector contributes to the accomplishment of DoD support services. At present the data base includes information on approximately 100 functions performed throughout the Defense Establishment. However, the Inventory does not give a complete picture of DoD's reliance upon the private sector because the data base is not all-inclusive. Exclusions are:

- functions that are generally obtained entirely through contract such as stevedoring, tire recapping, and mortuary services
- installations at which a single contractor provides almost all of the base operating support services such as at Vance AFB
- overseas C/I activities and services
- in-house C/I activities and contracts with annual costs of \$50,000 and less.

The extent to which these exclusions cause DoD's contract manpower to be underestimated is uncertain.

Additionally the number of contract manyears reported for C/I activities included in the Inventory is significantly understated. This is because there is a large number of records in the Inventory where the function is shown to be contracted-out, but no estimate is provided for contract manyears. This is shown in Table 6.

Table 6
Understatement of Contract Manyears
in FY75 C/I Inventory

Component	Total Contracted Activities Reported	Reported Activities With No Manyear Estimate	% of No Entry
Army	1,614	316	20
Navy	919	328	36
Marine Corps	89	31	35
Air Force	613	0	0
Defense Agencies	136	64	47
TOTAL	3,371	739	22 avg.

Based on overall DoD averages, it is estimated that the understatement for contracts currently included in the Inventory is at least 30,000 manyears.

The C/I Inventory is still useful as an indicator of trends in the number of manyears of effort obtained annually from the private sector. For example, it shows that the number of contract manyears reported has remained fairly stable over the FY1972-1975 period, averaging about 100,000 each year. This is significant because it means that without this contract support there would have to be at least 100,000 more civilians in the DoD in-house workforce. The next portion of this section discusses improvements being made in the C/I program to help assure that DoD is relying on the private sector to the maximum extent. Table 7 highlights the areas of DoD's reliance upon the private sector for support services in FY1975 as reported in the C/I Inventory.

EFFORTS BEING MADE TO STRENGTHEN DOD'S IMPLEMENTATION OF THE C/I PROGRAM

DoD recently studied the problems of administering the C/I program. The following procedural and policy changes were identified to strengthen the program and to overcome some of the problems discussed on pages 12-15.

Procedural Improvements

First, a new uniform procedure, similar to that currently used by the Air Force, will provide for a firm bid or proposal. Under the new procedure in-house people will prepare a bid as to the cost of their performance of the function. This is to be validated by audit, sealed and opened along with bids from the private sector. Then the function will be awarded to the lowest qualified bidder - either a contractor or in-house. The in-house bid will also be open to challenge. This will subject in-house functions to competition, and will encourage increased productivity lest the "business" be lost to a contractor.

Second, OSD audit personnel will be asked to make a limited number of visits to each of the Military Department field stations (for example, ten stations for each of the departments each year). At these stations they will perform a detailed audit of the management of the C/I program with particular reference to the validity of the reviews of those functions.

Third, any of the triennial reviews (of each of the more than 8,200 C/I activities) which results in a decision to continue in-house will require approval at a higher level. The reviews are now generally carried out by the individuals responsible for the in-house effort.

DoD has also proposed to the Office of Federal Procurement Policy (OFPP) certain procedural changes in the cost analysis techniques used to support in-house versus contract determinations. These include: (1) allocating a larger percentage base pay as the cost of Civil Service

Table 7

FY1975 C/I Inventory: Contract Support Services

Function/Subfunction	Manyyears Reported	Cost of Contracts (\$000)
MAINTENANCE OF EQUIPMENT		
Total	(44,510)	(1,320,827)
Aircraft & Aircraft Engines	21,621	480,105
Missiles	966	43,027
Vessels	17,565	706,230
Electronic and Comm. Equip.	1,166	39,268
All Other	3,192	52,197
INSTALLATION SERVICES		
Total	(29,104)	(329,356)
Bus Services	209	2,718
Laundry, Dry Cleaning	729	5,690
Custodial	9,802	77,247
Refuse Collection & Disposal	1,355	18,069
Food Services	9,242	66,197
Motor Vehicle Ops & Mntce	687	12,548
Guard Services	783	7,249
All Other	6,297	139,638
OTHER NONMANUFACTURING OPERATIONS		
Total	(10,698)	(318,095)
Training & Consultant Serv.	754	8,660
Contractor Eng'r'g & Tech. Serv.	1,332	52,598
Photographic, Film & TV Serv.	567	12,312
All Other	8,045	244,525
AUTOMATIC DATA PROCESSING		
Total	(2,994)	(166,546)
PRODUCTS MANUFACTURED/FABRICATED		
IN-HOUSE		
Total	(254)	(3,956)
REPAIR, ALTERATION & MINOR CON-		
STRUCTION OF REAL PROPERTY		
Total	(8,562)	(165,381)
Building & Structures	5,820	118,145
Grounds	777	5,566
All Other	1,965	41,670
TOTAL CONTRACT SUPPORT SERVICES	96,122	\$2,304,161

retirement, compared to the 7 percent currently allocated;* (2) projecting cost increases that will result from Federal pay increases; and (3) accounting for "taxes foregone" when a function is performed in-house, rather than by a contractor who must pay Federal taxes. DoD has proposed to the OFPP that they seek from Internal Revenue a figure updated periodically which would indicate the approximate percentage of the total dollar intake from a government contract that would come back to the government through the taxation process. This may vary from industry to industry and and probably by geographic area.

Policy Improvements

DoD believes that certain policy changes should be made to the basic policy document, OMB Circular A-76, so as to make its application to Defense functions within the review cycle was established in 1967. Inflation has reduced the significance of that figure over the last several years. Lifting the ceiling would reduce the number of reviews to be done in the Military Departments and would thereby enable them to concentrate their management efforts. Accordingly, DoD has suggested to OFPP that the operating cost threshold be increased from the present \$50,000 to \$100,000 provided that DoD maintain flexibility with respect to the disposition of the activities falling below the threshold.

Under DoD's current procedures, activities presently performed in-house at many installations may be too small to interest contractors and to facilitate effective competition. Accordingly, DoD will change its C/I procedures such that several of these small activities can be grouped together into one generic group and the combined package offered for bid. Thus, a contractor might be more interested in competing for a job involving a combination of efforts such as custodial work, trash collection, buildings, grounds and structure maintenance.

Other Improvements

Concurrent with DoD's efforts to resolve the policy and procedural arrangements with OFPP, action has been initiated within DoD to review the commercial and industrial program, and to propose additional commercial and industrial categories that should be added. Under consideration are such new areas as: missile site maintenance, dental services and veterinary services. The addition of categories to the program means that their method of performance will have to be justified according to the policies of the program and that they will be subjected to periodic review, thereby helping to assure that DoD is relying on the private sector to the maximum extent for these products and services.

*On August 23, 1976 OFPP published a proposed transmittal memorandum to A-76 which increases the retirement and disability cost factor to 24.7 percent; the health insurance contribution factor to 3.5 percent and the life insurance contribution factor to 0.5 percent.

APPENDIX A

EXTRACT FROM HOUSE REPORT NO. 94-199

OVERSIGHT—TITLES III-VI

Several matters in the manpower and personnel area, do not relate specifically to the authorizing function in Titles III-VI yet they bear comment.

DEFENSE MANPOWER EFFICIENCY

For the past decade, the United States has been moving toward a higher priced defense structure. One of the most important contributing factors has been the marked increase in the cost of defense manpower; indeed manpower costs absorb over half of the total defense budget, a situation brought on both by increases in the price of personnel as well as by the more intensive use of manpower.

A sizable part of the cost of manpower is determined by policy issues that are related to efficiency rather than to foreign policy or defense strategy. The fact that these policies were developed when military manpower, under conscription, was plentiful and relatively cheap underscores the need for reassessment.

Thus far, principal attention has been directed toward questions of efficiency on the margin that have yielded only modest returns. Major changes in the efficiency with which the Defense Department operates calls for more far-reaching studies of the underlying philosophy of manpower utilization.

For example, the current defense labor force is composed of about two million active military, one million reserve military, one million civilians, and an undetermined number of contract personnel. What criteria determine that mix? Do methods exist for determining the "full" cost of each? If not, are such methods being developed? What will the mix look like in 1985?

Also the way in which weapon systems are designed has an important influence on manpower requirements. A greater degree of automation may reduce the requirement for operating personnel, but at the same time may increase the need for more highly skilled, more expensive support manpower. We must make tough judgments between weapons complexity and our ability to train manpower personnel. The full cost of manpower should be an integral part in the decisionmaking process on new weapons systems.

Closely related to the above are current logistics policies which to a large extent shape manpower requirements. For example, to what

extent are the possibilities being considered of maintaining larger inventories of complicated spare parts and fewer skilled personnel with an ability to repair them? And to what extent are supply systems being automated?

The defense training establishment is quite large. In fiscal 1976, about 230,000 people will man a training plant that will train an average of 256,000 students. This student to instructor/staff proportion merits careful study as to its composition both in the extent of educational opportunities provided to military personnel and in the staffing and overhead of the training establishment. In what ways is the Defense Department using recent educational technology to substitute equipment for people? What steps are being taken to eliminate duplication in training among the services? What measures exist to assess the payoff of career development as opposed to job-related skill training? What measures are being taken to reduce training overhead?

If these areas are not presently under intensive review, the Department of Defense should initiate such studies immediately. To encourage this, the Committee should be provided with the following information for each area specified by September 1, 1975:

- A brief description of the study approach;
- The agency conducting the study;
- The findings to date; and
- The expected completion date of the study.

APPENDIX B

LETTER FROM WILLIAM K. BREHM, ASD(M&RA)
TO THE HONORABLE MELVIN PRICE, CHAIRMAN, HOUSE COMMITTEE
ON ARMED SERVICES, SEPTEMBER 22, 1975

22 SEP 1975

Honorable Melvin Price
Chairman, Committee on
Armed Services
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

This letter responds to the direction given by the Committee, in Report No. 94-199, pages 76-77, related to Congressional oversight of defense manpower efficiency. The Report stated that the Department of Defense should initiate studies related to manpower efficiency in the following four areas, if they are not presently under intensive review:

1. Mix of the Defense labor force among active military, reserve military, civilians, and contract personnel.
2. Impact of manpower costs on new weapon systems.
3. Impact of logistics policies on manpower requirements.
4. Efficiency of the defense training establishment.

All four of these areas are central to manpower management in the Department of Defense, and are the subject of continued and intensive review. The following paragraphs provide the information in each area requested by the Report.

1. MIX OF DEFENSE LABOR FORCE

The Report asked the following questions:

1. What criteria determined the mix of the current defense labor

force, i. e., active, reserve, civilian, and contract?

2. What methods exist for determining the full cost of each? Are such methods being developed?

3. What will the mix be in 1985?

The primary objective for the Department of Defense is the development of efficient forces for the protection of the United States. The needs of deterrence, peacetime presence, and immediate response demand that major portions of the force be active. Reserve forces provide the follow-up military manpower required to meet mobilization needs. The civilian manpower needs are determined by those manpower requirements that can be met by nonmilitary manpower. The Annual Reports of the Secretary of Defense, the Chairman of the Joint Chiefs, and the Services address the particular question of the active and reserve military requirements. The remaining issues will be studied this year.

The study will be conducted by the Assistant Secretary of Defense (Manpower and Reserve Affairs), with the assistance of the Assistant Secretary of Defense (Comptroller). The study will review policies and procedures for determining the mix of manpower among the different categories, and will include a review of previous studies. In addition, other material from on-going studies will be incorporated. These studies include: (1) Economic Cost of Military and Civilian Personnel (Assistant Secretary of Defense-Comptroller); (2) Triennial Reviews of Criteria for Choosing Between In - House and Contract Labor (Assistant Secretary of Defense-Installations and Logistics); (3) Quadrennial Review of Military Compensation (Assistant Secretary of Defense-Manpower and Reserve Affairs). This study will recommend what additional methods might be required to improve the processes for determining manpower costs.

We do not foresee that the manpower mix in 1985 will be substantially different from what it is now.

2. IMPACT OF MANPOWER COST ON NEW WEAPON SYSTEMS

The committee report highlighted the important influence of weapon systems design on manpower requirements. To address this, a joint study will be done by the Director of Defense Research and Engineering, the Assistant Secretary of Defense (Installations and Logistics), and the Assistant Secretary of Defense (Manpower and Reserve Affairs). It will review the development and acquisition process, including the DCP/DSARC process, to determine whether the full cost of manpower is

being adequately considered in the weapon systems acquisition process, and will recommend what actions should be taken (if necessary) to improve consideration of manpower costs and requirements at appropriate steps in the weapon systems acquisition process.

3. IMPACT OF LOGISTICS POLICIES ON MANPOWER REQUIREMENTS

The committee asked the following questions:

1. To what extent are possibilities being considered of maintaining larger inventories of complicated spare parts and fewer skilled personnel with an ability to repair them?

2. To what extent are supply systems being automated?

A study will be conducted by the Assistant Secretary of Defense (Installations and Logistics) with the assistance of the Assistant Secretary of Defense (Manpower and Reserve Affairs).

4. EFFICIENCY OF THE DEFENSE TRAINING ESTABLISHMENT

The committee report asked:

1. In what ways is the DoD using recent educational technology to substitute for people in the training establishment?

2. What steps are being taken to eliminate duplication in training among the Services?

3. What measures exist to assess the pay-off of career development as opposed to job-related skill training?

4. What measures are being taken to reduce training overhead?

A study will be done by the Assistant Secretary of Defense (Manpower and Reserve Affairs), with the assistance of other interested agencies of the Office of the Secretary of Defense and of the Services. We intend to combine this study with the study and report on DoD training required in the House/Senate Conference Committee Report on the FY 76 Defense Authorization Bill. The study will examine the amount of manpower devoted to the conduct and support of military training. It will: (1) determine the amount of manpower primarily attributable to training, as opposed to nontraining missions performed by elements of training

organizations; (2) analyze the allocation of manpower to functions within the training missions; and (3) provide the conclusions regarding appropriate level of staffing. The study will also consider alternative approaches to conducting training, including additional use of new training technology. Civilian training and education systems will be examined for lessons applicable to military training and education, particularly with regard to staffing standards.

Our more recent reviews have indicated that our current manpower accounting systems do not adequately represent the true picture of manpower properly attributable to training. In some cases, manpower engaged in missions not related to the individual training mission is included as part of training manpower; in other cases, some training manpower may be accounted for in other functional categories. A part of the study effort must therefore be applied to resolving these discrepancies. Our preliminary investigations into staffing of civilian educational institutions have disclosed considerable differences in accounting systems from that used in DoD; particularly, the number of supporting personnel, inside and outside of civilian school systems, appears to have been underestimated or ignored in some of the comparisons with DoD staffing which have recently been reported. We intend to explore this issue further.

SCHEDULE

The studies are expected to continue over a long period of time. We will, however, provide our findings to date in all four areas to the Committee by March 1, 1976.

Sincerely,

(signed) William K. Brehm